



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61K 31/00		(11) International Publication Number: WO 00/44367
		A2 (43) International Publication Date: 3 August 2000 (03.08.00)
(21) International Application Number: PCT/US00/02328 (22) International Filing Date: 1 February 2000 (01.02.00) (30) Priority Data: 60/117,988 1 February 1999 (01.02.99) US 60/127,749 5 April 1999 (05.04.99) US 60/137,098 2 June 1999 (02.06.99) US 60/142,306 3 July 1999 (03.07.99) US 60/166,326 19 November 1999 (19.11.99) US		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(71) Applicant (for all designated States except US): DERMAL RESEARCH LABORATORIES, INC. [US/US]; 5501 NW Fox Hill Road, Parkville, MO 64152 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): BROWN, Harold, G. [US/US]; 5501 NW Fox Hill Road, Parkville, MO 64152 (US). COOPER, Carol, A. [US/US]; 4 Glennvue Drive, Pittsburgh, PA 15205 (US). HENNESSY, Kristina, J. [US/US]; 5515 Bluff Drive, Parkville, MO 64152 (US). BROWN, Karen, K. [US/US]; 5201 NW Fox Hill Road, Parkville, MO 64152 (US).		Published <i>Without international search report and to be republished upon receipt of that report.</i>
(74) Agent: WEINER, Marc, S.; Birch, Stewart, Kolasch & Birch, L.L.P., P.O. Box 747, Falls Church, VA 22040-0747 (US).		
(54) Title: A PHARMACEUTICAL COMPOSITION OF COMPLEX CARBOHYDRATES AND ESSENTIAL OILS AND METHODS OF USING THE SAME		
(57) Abstract The invention discloses the discovery that a pharmaceutical composition containing complex carbohydrates with or without natural or synthetic essential oils can work effectively as a topical, oral or mucosal pharmaceutical composition. Such pharmaceutical compositions reduce inflammation, assist in wound healing, protect against bruising, relieve itching, relieve pain and swelling and treat topical bacterial infections such as acne and decubitus ulcers and prevent and treat numerous other conditions and diseases. Such pharmaceutical compositions can be administered to mammals including humans. Also included in this invention are methods to deliver topically applied macromolecules into the tissue of mammals and methods of blocking the adhesion, metastatic and coronary cascades.		